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WEST ADAMS STREET, CHICAGO RIVER BRIDGE  
(Chicago River Bascule Bridge, West Adams Street)  
I&M Canal National Heritage Corridor  
Chicago  
Cook County  
Illinois

HAER No. IL-51

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
National Park Service  
Department of the Interior  
P.O. Box 37127  
Washington, D.C. 20013-7127

HISTORIC AMERICAN PHOTOGRAPHS

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**Location:** I & M Canal National Heritage Corridor  
West Adams Street crossing the Chicago  
River (South Branch)  
Chicago, Cook County, Illinois

**UTM:** 16 E.447050 N.4636360  
**Quad:** Chicago Loop

**Date of Construction:** 1926

**Builder:** Substructure, Fitzsimons & Connell  
Dredge and Dock Company

Superstructure, Strobel Steel  
Construction Company

**Present Owner:** City of Chicago

**Present Use:** Bridge

**Significance:** The development of the Chicago trunnion  
bascule bridge occurred during the first  
three decades of the twentieth century.  
Despite the controversy over patent  
infringement -- Joseph E. Strauss  
charged the City of Chicago engineers  
with infringing on his patented Strauss-  
Trunion bascule bridge -- the Chicago  
bascule received great acclaim within  
the civil engineering profession. The  
design of the Adams Street Bridge was  
specifically modified to accommodate the  
congestion of the area.

**Project Information:** The Illinois and Michigan Canal was  
designated a National Heritage Corridor  
in 1984. The following year HABS/HAER  
embarked on an extensive inventory and  
documentation project of the 100 mile-  
long corridor. Field work for this  
project was concluded in 1988. Final  
editing of the documentation was  
completed in 1992.

**Historians:** Charles Scott, Frances Alexander, and  
John Nicolay, 1986.

The substructure of the Adams Street Bridge was constructed by the Fitzsimons & Connell Dredge and Dock Company; the superstructure was constructed by the Strobel Steel Construction Company. The Chicago trunnion bascule bridge was developed to accommodate the heavy demands of both land and water traffic. However, because of the congestion at Adams Street, a different design for the bridge's lifting machinery was required. The machinery on the east side of the bridge bears directly on the masonry with the outermost trunnions resting on steel columns, and the inner trunnions resting on steel S-girders. On the west side of the bridge, however, the outermost trunnions support the machinery and rest on longitudinal girders spanning from the front to the rear of the piers. The inner trunnions rest on S-girders. The presence of a railroad track on the west side of the bridge prevented any great extension of machinery; thus, the arm is quite short, needing only a shallow pit. The volume of the counterweight box has been reduced below the most desirable dimensions.

The Adams Street Bridge is a single-deck, double-leaf, trunnion bascule bridge. The bridge measures 199'-0" from center to the center of the trunnions and has a clear span of 173'-0". The superstructure is a steel deck truss with riveted gusset-plate connections. Width measures 64'-0" and has four lanes for vehicular traffic and two sidewalks. The guard rails contain decorative ironwork. The rusticated concrete abutments contain several small, glass, block windows. The bridge tender's houses, one on each side of the lift span, are designed in the Beaux-Arts style. The houses are identical in design and feature a lightly scored concrete veneer with chamfered corners and ornamental pilasters, a sopraporta (overdoor) with a decorative arch, numerous multi-light windows along the facade of the pylons, and large, one-over-one-light, double-hung, sash windows below a mansard-like tin roof with a raised diamond pattern.

**SOURCES:**

"Aesthetic Design for Drawbridges," Engineering News. v. 70 (November 6, 1913): 926.

"Chicago Settles with Strauss for Infringing Bridge Patent," Engineering News-Record, v. 85 (December 9, 1920), 1158-59.

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Donald N. Becker, "The Story of Chicago's Bridges," Midwest Engineer, 2 (January 1950): 3-9.

Chicago Department of Public Works, Chicago Public Works: A History (Chicago: Rand McNally, 1973).

"The Chicago Type of Bascule Bridge," Engineering Record, v. 42 (July 21, 1900): 50-52.

"The Lift of Bascule Type Movable Bridges," Engineering Record, v. 42 (July 28, 1900): 73.